

# FluidLoc™ cable inhibits oil migration

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**P**robe and extension cables are often installed in environments exposed to oil mist or are routed through drainage passages. In a few instances, oil can actually penetrate the braid through small cuts or abrasions. The oil then migrates along the cable by capillary action. When the probe's cable-to-extension cable connection is located inside the machine, more paths are created for oil penetration into the cable's external braiding.

Cuts and abrasions to cables can occur during the installation of proximity transducer systems. Sometimes probes must be installed in tight spaces, where small abrasions are difficult to detect. The standard 3300 Series proximity transducer cable features a nonconductive outer braid that protects the cable from external damage. FluidLoc™ (patent pending) sealed cables are even more robust to prevent oil migration through the cable by way of cable connectors, abrasions and cuts.

Oil used in industrial environments often has reduced viscosity, due to increased temperature, which enables oil

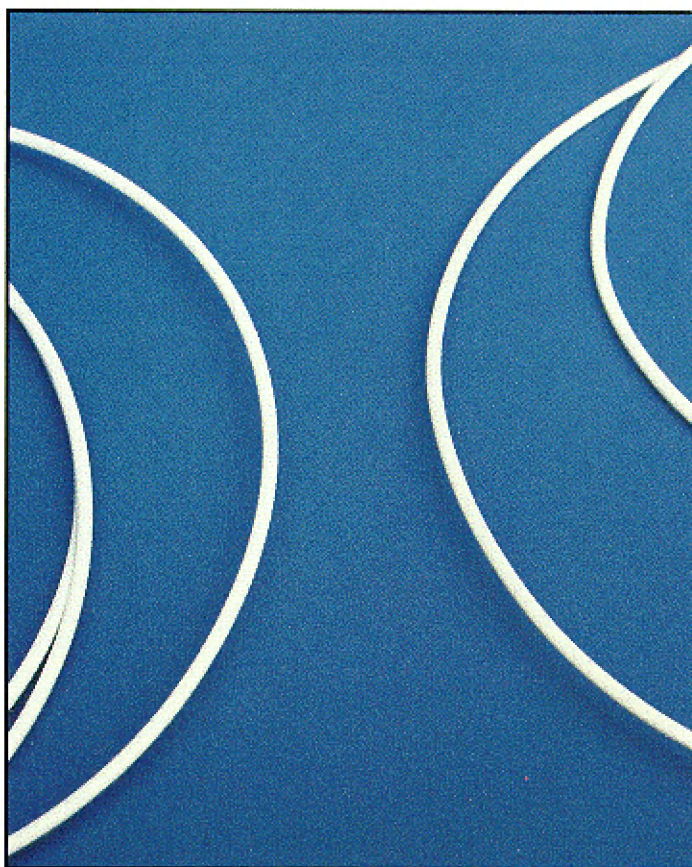
to penetrate and flow through the smallest voids and cavities.

In the past, users tried a variety of approaches to correct the problem of oil migration in probe cables. Devices, such as oil "dams," have been used with some success. Although they usually worked, they were often difficult to install and expensive to manufacture. Furthermore, these devices only prevented oil migration within the probe cable from reaching areas outside the machine, and were not designed to prevent oil migration in the opposite direction toward the probe tip.

FluidLoc-impregnated cable is, for all practical purposes, identical to any non-impregnated proximity

transducer cable. Its outer diameter is unchanged, and its flexibility is not compromised. The cable bending radius is rated at 25.4 mm (1 inch), the same as our standard 3300 Series proximity transducer cable.

Our Custom Products Department can apply this technology to most 3300 and 7200 Series proximity probe cables. Contact your nearest Bently Nevada representative for details. ■



**The cable on the right is FluidLoc. The cable on the left is standard. FluidLoc prevents oil migration without affecting cable diameter or bending radius.**